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09/673,300	10/16/2000	Keiko Sakakibara	001560-387	5308

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EXAMINER	
EINSMANN, JULIET CAROLINE	
ART UNIT	PAPER NUMBER
1634	18

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/673,300	Applicant(s) SAKAKIBARA ET AL.	
	Examiner Juliet C Einsmann	Art Unit 1634	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 May 2002* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-6,9,10 and 13-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3-6,9,10 and 14-24* is/are rejected.

7)☒ Claim(s) *2 and 13* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *16 October 2000* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *17* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

1. This action is written in response applicant's correspondence submitted 5/28/02, paper number 16. Claims 1-4 and 9-10 have been amended, claims 7, 8, 11, and 12 have been canceled, and claims 13-24 have been added. Claims 1-6, 9-10, and 13-24 are pending. Applicant's amendments and arguments have been thoroughly reviewed, but are not persuasive for the reasons that follow. Any rejections not reiterated in this action have been withdrawn. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action. **This action is FINAL.**

Election/Restrictions

2. Applicant is reminded that nucleic acids encoding SEQ ID NO: 8 and SEQ ID NO: 10 have been withdrawn from prosecution with traverse in paper number 13. Prior to allowance of any claims, removal of these sequences from the claims will be required. A complete reply to the final rejection must include cancelation of nonelected subject matter from the claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Information Disclosure Statement

3. The information disclosure statement (IDS) submitted with the response filed 5/28/02 (paper number 17) has been considered by the examiner. A signed copy of the 1449 is enclosed.

Claim Rejections - 35 USC § 112, 2nd paragraph

4. Claims 10, 16, 20, and 24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 10, 16, 20, and 24 are indefinite over the recitation "or a progeny thereof" because it is not clear if this is referring to the flower or to the plant. It is not clear how a flower has a progeny.

Claim Rejections - 35 USC § 112, 1st paragraph

5. Claims 1, 3, 4, 5, 6, 9, 10, 17, 18, 19, 20, 21, 22, 23, and 24 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. MPEP 2163.06 notes "If new matter is added to the claims, the examiner should reject the claims under 35 U.S.C. 112, first paragraph - written description requirement. In re Rasmussen , 650 F.2d 1212, 211 USPQ 323 (CCPA 1981)."

In instantly rejected claim 1, the language "wherein said gene encodes an amino acid sequence having at least 43% sequence homology with an amino acid sequence..." appears to be new matter. The response did not identify specific basis for this limitation in the specification, and a review of the specification failed to locate any discussion of genes that encode amino acid sequences having any percent homology with the disclosed amino acid sequences. Thus, there is no basis for this added limitation and the claims are rejected as containing new matter.

Furthermore, the new limitation of "excluding a gene of Labuatae" in claims 1, 3, and 4 appears to represent new matter. No specific basis for this limitation was identified in applicant's paper, nor did a review of the specification by the examiner find any basis for the limitation. The exclusion proviso in which "a gene of Labuatae" is excluded from the claims does not appear to have descriptive basis in the specification. As noted by MPEP 2173.05(i),

> "Any negative limitation or exclusionary proviso must have basis in the original disclosure. See Ex parte Grasselli , 231 USPQ 393 (Bd. App. 1983) aff'd mem., 738 F.2d 453 (Fed. Cir. 1984). The mere absence of a positive recitation is not basis for an exclusion. Any claim containing a negative limitation which does not have basis in the original disclosure should be rejected under 35 U.S.C. 112, first paragraph as failing to comply with the written description requirement."

Since no basis has been identified, the claims are rejected as incorporating new matter. The additionally rejected claims all depend from one of claims 1, 3, or 4 and thus are also rejected as containing new matter.

6. Claims 1, 3, 4, 5-6, 9-10, and 17-24 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

It is noted that these claims have been restricted and applicant has elected SEQ ID NO: 1 encoding SEQ ID NO: 2 for prosecution. No generic claim remains, and thus, all of the pending claims have been examined insofar as they pertain to nucleic acids encoding SEQ ID NO: 2.

The instantly rejected claims are directed towards nucleic acids that encode proteins that have an activity of transferring a glycosyl group to aurones. Of the rejected claims, claims 1, 3, and 4 are independent claims. Claim 1 encompasses any nucleic acid encoding a polypeptide that has an activity of transferring a glycosyl group to an aurone and that has at least 43% sequence homology with SEQ ID NO: 2, excluding a gene of Labuatae. Claim 3 encompasses a gene encoding a protein that has an amino acid sequence modified by the addition, deletion and/or substition with other amino acids of **one or a plurality of amino acids** in the amino acid

sequence set forth in SEQ ID NO: 2, and that has an activity of transferring a glycosyl group to aurones, excluding a gene of Labuatae (emphasis added). Thus, claim 3 encompasses any nucleic acid encoding a protein that has an activity of transferring a glycosly group to aurones, with the exception of a gene of Labuatae because the claim language allows for any number of substitutions, additions or deletions with respect to instant SEQ ID NO: 2. Claim 4 encompasses any gene encoding a protein that hybridizes (under recited condition) to a complementary strand of a nucleic acid having a nucleotide sequence encoding an amino acid sequence as set forth in SEQ ID NO: 2 **or a portion thereof,** wherein said protein has an activity of transferring a glycosyl group to aurones, excluding a gene of Labuatae (emphasis added). The inclusion of the "or a portion thereof" language in claim 4 broadens the claims such that the nucleic acids encompassed within this claim must only hybridize to some portion of the complementary strand of a nucleic acid sequence encoding instant SEQ ID NO: 2. Thus, the subject matter encompassed by claims 1, 3, and 4 (and those claims that depend from them) includes a large number (hundreds if not thousands) of different possible sequences.

The specification describes three specific sequences within this genus, SEQ ID NO: 1, 7, and 9. With regard to the elected invention, the instant specification only describes a single polynucleotide, the DNA encoding a protein having an activity of transferring a glycosyl group to an aurone from Antirrhinum majus, that nucleic acid being set forth as SEQ ID NO: 1. The nucleic acid that encodes SEQ ID NO: 2 is also considered to be supported by proper written description.

In making a determination of whether the application complies with the written description requirement of 35 U.S.C. 112, first paragraph, it is necessary to understand what

Applicant has possession of and what Applicant is claiming. From the specification, it is clear that Applicant has possession of a polynucleotide sequence having SEQ ID NO: 1 or encoding instant SEQ ID NO: 2. The subject matter which is claimed is described above. First, a determination of the level of predictability in the art must be made in that whether the level of skill in the art leads to a predictability of structure; and/or whether teachings in the application or prior art lead to a predictability of structure. The claims are directed a large genus of nucleic acid encoding a protein having an activity of transferring a glycosyl group to an aurone as defined and discussed previously, as well as vectors, hosts, and plants transformed with such a nucleic acid. Within the scope of the elected invention, the specification only describes a single protein and a single cDNA encoding that protein and fails to teach or describe any other polynucleotides that are related to SEQ ID NO: 1 within the limitations of the rejected claims. The specification provides no guidance as to how or where the disclosed polynucleotide can be modified yet still maintain the functionality required for the instant methods. The claims also fail to recite other relevant identifying characteristics (physical and/or chemical and/or functional characteristics coupled with a known or disclosed correlation between function and structure) sufficient to describe the claimed invention in such full, clear, concise and exact terms that a skilled artisan would recognize applicant was in possession of the claimed invention. For example, the specification does not provide any guidance as to the functional domains in the encoded polypeptides that are essential to maintain the function of the encoded enzyme. Therefore, there is a lack of guidance or teaching regarding structure and function because there is only a single example provided in the specification and because there is no guidance found in the instant specification.

Furthermore, all of these claims encompass nucleic acid sequences different from those disclosed in the specific SEQ ID NO which, for claim 1 includes modification within the bounds of nucleic acids encoding polypeptides having 43% homology to SEQ ID NO: 2, for claim 3 includes modifications by permitted by addition, substitution or deletion for which no written description is provided in the specification, and for claim 4 includes nucleic acids which hybridize to the specific SEQ ID NO and maintain the specified activity. The specification, as noted above, however, provides no guidance as to what changes can be made to the disclosed nucleic acids to produce nucleic acids which retain the correlative function.

It is noted that in Fiers v. Sugano (25 USPQ2d, 1601), the Fed. Cir. concluded that

> "...if inventor is unable to envision detailed chemical structure of DNA sequence coding for specific protein, as well as method of obtaining it, then conception is not achieved until reduction to practice has occurred, that is, until after gene has been isolated...conception of any chemical substance, requires definition of that substance other than by its functional utility."

For the instantly elected claims, only SEQ ID NO: 1 is described. Also, in Vas-Cath Inc. v. Mahurkar (19 USPQ2d 1111, CAFC 1991), it was concluded that:

> "...applicant must also convey, with reasonable clarity to those skilled in art, that applicant, as of filing date sought, was in possession of invention, with invention being, for purposes of "written description" inquiry, whatever is presently claimed."

In the application at the time of filing, there is no record or description which would demonstrate conception or written description of additional polynucleotides which have nucleotides modified by addition, insertion, deletion, substitution or inversion with respect to SEQ ID NO: 1 or those encoding instant SEQ ID NO: 2 but retaining correlative function as disclosed in the claims.

7. Claims 1, 3, 4, 5, 6, 9, 10 and 14-24 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while providing enabling disclosure for nucleic acids, vectors and host cells which comprise SEQ ID NO: 1, SEQ ID NO: 7 or SEQ ID NO: 9, does not reasonably provide enablement for other polynucleotides or transgenic plants or cut flowers which comprise SEQ ID NO: 1, SEQ ID NO: 7 or SEQ ID NO: 9. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims.

It is noted that these claims have been restricted and applicant has elected SEQ ID NO: 1 encoding SEQ ID NO: 2 for prosecution. No generic claim remains, and thus, all of the pending claims have been examined insofar as they pertain to nucleic acids encoding SEQ ID NO: 2.

Claims 1, 3, 4, 5, 6, 9, 10 and 14-24 are directed towards nucleic acids encoding a protein having an activity of transferring a glycosyl group to an aurone, as well as vectors, hosts, and plants transformed with such a nucleic acid. In each case, the nucleic acid is defined based on some variation(i.e. homology, hybridizes to, or is modified) of the nucleic acid that encodes instant SEQ ID NO: 2 or is the nucleic acid that encodes SEQ ID NO: 2. This genus encompasses nucleic acids from any organism which are able to transfer a glycosyl group to an aurone. The specification describes three specific sequences within this genus, SEQ ID NO: 1, 7, and 9. With regard to the elected SEQ ID NO: 1, the instant specification only describes a single polynucleotide, the DNA encoding a protein having an activity of transferring a glycosyl group to an aurone from Antirrhinum majus (snapdragon), that nucleic acid being set forth as SEQ ID NO: 1.

The state of the art for the isolation of cDNA or genomic clones with a defined functionality is highly unpredictable. Applicant has characterized and isolated three polynucleotide which have the activity of transferring a glycosyl group to an aurone, namely the SEQ ID NO: 1 (from snapdragon) and SEQ ID NO: 7 and 9 (from petunia). The specification demonstrates that SEQ ID NO: 1 has the activity of transferring a glycosyl group to an aurone (see example 5), and further provides non-elected SEQ ID NO: 7 and 9 which are also demonstrated to have the activity of transferring a glycosyl group to an aurone. The specification does not provide any other nucleic acids, nor does the specification identify or describe the common features among these nucleic acids that would enable one of skill in the art to make additional nucleic acids.

It is noted that the prior art provides a number of polynucleotides which are glycosyl transferases. However, it is not clear from the teachings of the prior art if these in fact would function to transfer a glycosyl group to an aurone. Furthermore, as is taught by applicant's specification, the prior provides one other polynucleotide which has the activity of transferring a glycosyl group to an aurone, that is UFGT1 gene which was disclosed in 1997 at the fifteenth annual meeting of Japanese Society of Plant Cell and Molecular Biology, and whose activity was confirmed by applicants (see example 1, beginning on pate 9). These nucleic acids are considered to be within the scope of the instant claims by virtue of their presence in the prior art.

Moreover, it is noted that the instant claims encompass nucleic acids that are related to SEQ ID NO: 1 based on hybridization or the fact that the encode a functional protein which is a "modified" version of SEQ ID NO: 1. However, Applicant provides no guidance for the regions of the disclosed gene which are essential or sufficient to encode a gene having the activity of

transferring a glycosyl group to an aurone, or for the regions of SEQ ID NO: 1 which are essential or sufficient to encode a gene the activity of transferring a glycosyl group to an aurone. In the absence of such guidance, undue trial and error experimentation would be required to screen the vast number of different polynucleotides which are modified versions of or that would hybridize (under any stringency conditions) to SEQ ID NO: 1 to identify those which encode a gene the activity of transferring a glycosyl group to an aurone.

Furthermore, the state of the art for modification of gene expression or of phenotypic characteristics in plants by genetic transformation is highly unpredictable and hence significant guidance is required to practice the art without undue experimentation. The instant specification provides no transgenic plants. In genetically modified plants, the introduced transgenes are sometimes not expressed, and they can also result in co-suppression effects. None of these effects are predictable, and the mechanisms of gene silencing are still not fully understood. Moreover, the phenotypic characteristics that will result from expression of a given DNA construct cannot be reliably predicted. In fact, often the expected phenotypic result is not achieved. The specification does not provide any guidance as to the effects that the instantly disclosed SEQ ID NO: 1 would have on a plant upon transformation of the plant. That is, it is unpredictable as to how the transgene would effect the plant, if in fact expression of the transgene were obtained. Thus, from the teachings of the instant specification, it is not possible to know how to use the transformed plants of the claimed invention.

Given the lack of guidance and specific examples commensurate in scope with the breadth of the claimed polynucleotides, given the unpredictability as to which sequences would retain the function required by the instant claims, given the unpredictability in the art of plant

transformation to obtain a specified phenotype, it is concluded that undue trial and error experimentation would be required to screen through the myriad of different DNA constructs and the vast number of transgenic plants to produce products commensurate in scope with the claimed invention. When all of the above is weighed, it is concluded that undue experimentation would be required to practice the invention throughout the full scope of the claims.

Claim Rejections - 35 USC § 102

8. Claims 1, 3, 4, 5, 6, 9, 17, 18, 19, 21, 22, and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by Bowles *et al.* (WO 97/45546).

Bowles *et al.* teach the TWI1 gene which has 61.9% local similarity to instant SEQ ID NO: 1 over nucleotides 87-1594 of SEQ ID NO: 1. The amino acid sequence encoded by the nucleic acid taught by Bowles et al. has 57.3% local similarity with instant SEQ ID NO: 2 (see attached alignment). The TWI1 gene is a glucosyl transferase. Bowles *et al.* further provide vectors, host cells and transgenic plants comprising this nucleic acid (see Example 10, page 29).

This rejection applies to claims 1, 3, 4, 5, 6, 9, 17, 18, 19, 21, 22, and 23 insofar as the TWI1 gene product would have the ability to transfer a glycosyl group to an aurone. It is not clear from the teachings of Bowles *et al.* whether or not this is an inherent property of the TWI1 gene, and the undertaking of scientific experiments to confirm such a property is not possible for examiner. However, based on the structural guidance provided in the specification and claims (i.e. the percent homology with the disclosed sequence) and the fact that the nucleic acid sequence taught by Bowles et al. encodes a glucosyl transferase, it is substantially identical to the nucleic acids within the scope of the claimed invention.

Response to Remarks

The rejection under 112 2nd is maintained and applied to the newly added claims. This rejection was not particularly addressed by applicant's remarks or amendments and is therefore reiterated. All other rejections under 112 2nd paragraph are withdrawn as being moot in light of applicant's amendments and remarks.

Applicant argues that the 112 1st paragraph, written description rejection no longer applies to the claims of record. Applicant's arguments are based on the fact that the language of each of the claims is contained in the specification. However, this is not persuasive. This language is not sufficient to provide for one skilled in the art of the essential structural characteristics of the claimed nucleic acids, and thus the rejected claims remain so as lacking written description for the reasons provided in the rejection.

Applicant traverses the 112 1st paragraph scope of enablement rejection, indicating the one skilled in the art could readily obtain the genes as claimed by looking at the sequence homology, by modifying the sequences or by hybridization of sequences. This is not persuasive. These means may be sufficient to isolate or make nucleic acids that meet the structural characteristics recited in the instant claims, however, these means in no way would provide one skilled in the are with the knowledge as to whether or not the isolated or created nucleic acids have the ability to transfer a glycosyl group to an aurone, as is required by the claims. Applicant has provided no specific guidance as to how or where SEQ ID NO: 2 could be changed but still retain the required activity. The ability to make such changes in a polypeptide while retaining activity is based largely on knowledge of the active site and domains of the encoded enzyme.

Absent this knowledge, the modification of the parent sequence to arrive at other sequences that retain the correlative function is highly unpredictable, as is discussed in the enablement rejection. The conclusion that undue experimentation would be required to practice the invention as claimed is based on the analysis of a number of factors. Applicant is correct is pointing out that simply because some experimentation is required the claims do not necessarily lack enablement, but a careful review of the rejection shows that the conclusion of lack of enablement was made in view of the lack of guidance and specific examples commensurate in scope with the breadth of the claimed polynucleotides, given the unpredictability as to which sequences would retain the function required by the instant claims, given the unpredictability in the art of plant transformation to obtain a specified phenotype, it is concluded that undue trial and error experimentation would be required to screen through the myriad of different DNA constructs and the vast number of transgenic plants to produce products commensurate in scope with the claimed invention.

It is noted that applicant's response to the enablement rejection focused on the portion of the rejection that discussed nucleic acids, but did not discuss enablement with regard to the transgenic plants claimed herein. Since this portion of the rejection was not particularly addressed, the rejection is maintained in this regard.

Applicant traversed the rejection under 102(b) in view of Bowles et al. because there is no disclosure in Bowles et al. that the TWI1 gene has the claimed activity of transferring a glycosyl group to aurone. Applicant is reminded that MPEP 2112.01 teaches "Where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a prima facie case of either

anticipation or obviousness has been established. In re Best, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). 'When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not.'" In the instant case, the claimed product is substantially identical in structure to the product taught by Bowles et al., and thus a prima facie case of anticipation has been established.

Applicant further argues that there is no teaching of a gene encoding an amino acid sequence having at least 40% homology with SEQ ID NO: 2. This is incorrect since the gene taught by Bowles et al. encodes a polypeptide with 57.3% local similarity with instant SEQ ID NO: 2. Applicant argues that there is no teaching of a gene encoding an amino acid sequence which is a modified sequence of SEQ ID NO: 2, however, since the claim in no way limits the number of modifications to SEQ ID NO: 2, any amino acid sequence could be construed as a "modified version" of SEQ ID NO: 2. In fact, the sequence taught by Bowles has 274 matches in common with SEQ ID NO: 2, and the rest of the amino acids are considered to be modified. Finally, applicant argues that the reference does not teach a nucleic acid that hybridizes to the complementary strand of SEQ ID NO: 2. It is assumed that applicant intended to write that the reference does not teach a nucleic acid that hybridizes to the complementary strand of a nucleic acid encoding SEQ ID NO: 2 or a portion thereof. Even so, given the high degree of similarity between SEQ ID NO: 1 (which encodes SEQ ID NO: 2) and the nucleic acid taught by Bowles et al., it is evident that the nucleic acid taught by Bowles et al. would hybridize to at least a portion of a nucleic acid encoding SEQ ID NO: 1. Thus, the rejection under 102 is maintained.

Claim Objections

9. Claims 2 and 13 are objected to because they contain non-elected subject matter. If claims 2 and 13 were amended to remove reference to SEQ ID NO: 8 and 10 these claims would be allowable.

Conclusion

10. No claims are allowed.

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Juliet C. Einsmann whose telephone number is (703) 306-5824. The examiner can normally be reached on Monday through Friday, from 9:00 AM until 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, W. Gary Jones can be reached on (703) 308-1152. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-4242 and (703) 305-3014.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0196.

Juliet C Einsmann
Examiner
Art Unit 1655

August 7, 2002

JEFFREY FREDMAN
PRIMARY EXAMINER